

OCCUPATIONAL INJURIES AND DISEASES IN **ALBERTA**



Lost-Time Claims, Disabling Injury
Claims and Claim Rates

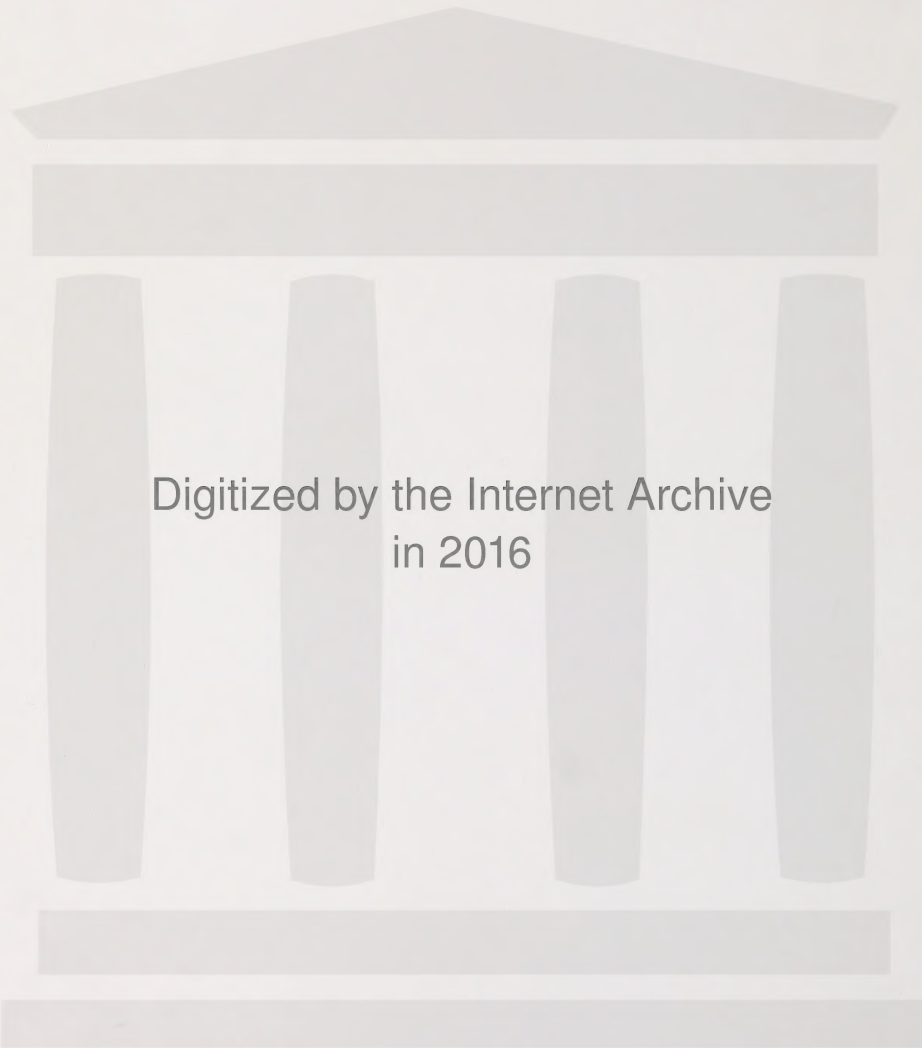
Wholesale and Retail Industries

2003 to 2007

Summer 2008



Alberta Employment and
Immigration



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HIGHLIGHTS

Lower lost-time and disabling injury rates in 2007.

- In 2007, the Wholesale and Retail sector lost-time claim rate decreased by 10.7% to 2.17 per 100 person-years worked, from 2.43 per 100 person-years worked in 2006. The average lost-time claim rate for all sectors in the province was 2.12 per 100 person-years worked.
- In 2007, the Wholesale and Retail sector had a duration rate of 35, a 19.0% decrease from the 2006 rate of 44. This duration rate is lower than the provincial rate of 48 days lost per 100 person-years worked.
- The disabling injury rate decreased by 3.1%, from 3.67 per 100 person-years worked in 2006 to 3.55 in 2007. The average disabling injury rate for all sectors in the province was 3.88 per 100 person-years worked.
- The decreases in the lost-time claim and disabling injury rates in 2007 were the result of the decreases in the numbers of lost-time and injury claims. Lost-time claims decreased by 9.1% and disabling injury claims by 1.5%.
- The 2007 fatality rate was 32 per million person-years worked. This rate is the same as the 2006 rate. The average fatality rate for all sectors in the province in 2007 was 93 per million person-years worked.

Large size employers experienced the highest injury rates.

- Employers with 100 or more person-years worked had the highest lost-time claim rate in 2007, at 2.67 per 100 person-years worked.
- Employers with 100 or more person-years worked had the highest disabling injury at 4.76 per 100 person-years worked, followed by employers with 40 to 99 person-years worked, 2.96 per 100 person-years worked.
- Employers with more than 100 person-years worked had a disabling injury rate almost double their lost-time claim rate. Lost-time claim rates and injury rates in the Wholesale and Retail sector increase with the size of the employer.

Injury rates decreased in most sub-sectors.

- Lost-time claim rates decreased in all Wholesale and Retail sub-sectors, except for the Other Retail Services sub-sector, which showed an increase in its lost-time claim and disabling injury rates in 2007.
- The Food and Beverage sub-sector had the highest lost-time claim and disabling injury rates at 3.84 and 5.84 per 100 person-years worked respectively.
- The Office, Medical and Entertainment Equipment sub-sector had the lowest lost-

time claim and disabling injury rates at 0.33 and 0.48 per 100 person-years worked respectively.

- The Wholesale and Retail sector accounted for 19.5% of the person-years worked in the province, 19.9% of the lost-time claims, 17.2% of modified work claims, and when combined, 17.8% of the disabling injury claims.

In 2007, sprains, strains and tears were the most common nature of injury.

- Sprains, strains and tears continued to be the leading nature of injury, accounting for 49.9% of the disabling injury claims submitted in the Wholesale and Retail sector.
- The back (including spine and spinal cord) was the most commonly injured body part, accounting for 26.2% of all disabling injury claims. Lost-time claims connected with wrists and hands excluding fingers displayed a relative proportion that was 1.3 times the average for all sectors.
- The primary sources of injury causing disabling injury claims were containers, accounting for 19.8% of the disabling injury claims, followed by persons, plants, animals and minerals, 18.9%. Compared to the average for all sectors in the province, vehicles and furniture and fixtures displayed relative proportions that were 1.8 and 1.6 times higher than the average for all sectors respectively.
- In 2007, the most common type of event or exposure was bodily reaction or exertion which accounted for 44.3% of lost-time claims and 44.5% of disabling injury claims. Disabling injury claims caused by fires and explosions, however, had a relative proportion that was 1.2 times the average for all sectors.

Sustainable Economic Growth

A few notes about this report:

- This report presents 2007 data beside 2006 data to help with comparisons. Additional historical data are presented where possible.
- Information presented in this report is based on incidents that occurred during 2007 and accepted as lost-time or modified work claims by WCB as of March 31, 2008.
- About 80% of employed persons in Alberta are covered by WCB. This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as are some industries where WCB coverage is not compulsory.
- Injury claim rates based on a small number of person-years worked are too volatile to make valid comparisons over time. Therefore, claim rates are not calculated when there are fewer than 40 person-years worked. Duration rates are also volatile when based on a small number of lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.
- Estimates of year-over-year change for rates presented in this report are calculated using unrounded figures and may not match those produced from rounded figures. Percentages displayed in tables may also not total 100, due to rounding.
- Throughout the report, the lost-time claim rate is the number of lost-time claims per 100 person-years worked, the disabling injury rate is the number of disabling injury claims per 100 person-years worked and the duration rate is the number of days lost per 100 person-years worked. Fatality rates are expressed as the number of fatalities per million person-years worked.
- Analyses by industry are based on WCB industry classification and aggregation. For more information see http://www.wcb.ab.ca/pdfs/08rate_manual.pdf.
- Analyses by occupation group are based on the National Occupation Classification (NOC). The NOC provides a standard list of occupations across the country. For more information see <http://www5.hrsdc.gc.ca/NOC-CNP/app/index.aspx?lc=e>.
- Occupational injuries and diseases listed throughout this report are based on the Z795 Coding of Work Injury or Disease Information produced by the Canadian Standards Association (CSA) for categorizing occupational injury and disease. For information see <http://www.csa-intl.org/onlinestore/GetCatalogDrillDown.asp>.
- Terms, definitions and formulas used throughout this report are described in Appendix A.

INTRODUCTION

Role of the Ministry of Employment and Immigration

The Ministry of Employment and Immigration includes the reporting entity of the Department of Employment and Immigration (E&I). E&I develops and delivers policies, programs and services to foster labour force development; ensure fair, safe and healthy workplaces; and help those in need. The Department also provides leadership for immigration and interprovincial labour mobility policy for the Government of Alberta, and coordinates resources to support the settlement and integration of new Albertans.

Occupational Injuries and Diseases in Alberta - Wholesale and Retail Industries 2003 to 2007

E&I prepares this annual report to provide analysis of workplace health and safety to meet the demand from industry and safety associations, labour organizations, employers and workers for incorporating this information into their strategic plans for enhancing workplace health and safety. This includes:

- descriptions of programs and initiatives undertaken in pursuit of its workplace health and safety mission and goals;
- analysis of provincial occupational injury and disease information against a national picture;
- estimations of the risk of injury or disease at the provincial, industry sector and sub-sector level as well as general descriptions about the incidents and injured workers; and
- analysis of workplace injury and disease literature in Alberta.

The *Occupational Injury and Diseases in Alberta* publications present analysis of aggregate injury claim data to allow for the tracking of workplace health and safety performance over time. This is important for evaluating past and present performance, and in providing strategic information for the direction of workplace health and safety policy. The analysis contained in this report provides a comprehensive picture of workplace injuries in the province, allowing for a prevention focus to be made based on injury probabilities, rather than possibilities.

Sustainable Economic Growth

E&I promotes safe, healthy and productive workplaces, as well as fair, equitable and stable labour relations to ensure a fair, safe and healthy work environment for Alberta's workers. Work is central to people's lives, and to the stability of families and societies. People want

work that provides them with an acceptable standard of living. It is important that workers enter an environment where their health and safety are protected, where they are treated with respect and they are compensated fairly for the job they are doing. This results in an attractive workplace that furthers the position of Alberta employers to be competitive in the global economy (see Note 1.1). Alongside the human cost of occupational injuries and diseases and the impact on families and society, the economic costs are numerous.

In 2008, direct compensation payments for occupational injury and disease by WCB were projected to total \$755 million.¹ These costs are ultimately paid by employers through premium payments, and impact the costs of running a business as well as the final cost of delivering products and services. Further costs associated with occupational injuries and diseases include the material damage to equipment and premises, the additional cost of hiring staff to cover for injured workers, and the lost productivity resulting from the absence. Additional impacts of poor health and safety for employers include higher absenteeism and lower morale of employees, loss of skilled and experienced employees, loss of the company's investment in training, and difficulty recruiting high-quality employees due to the loss of image (particularly in the case of subcontractors to larger companies) all leading to losses in productivity and underutilization of production (see Note 1.2).

Other costs borne by the economy and society due in part to work-related injuries and diseases include early retirements, unemployment and poorer households. The International Labour Organization (ILO) estimates that in high-income countries, around 40% of all retirements (before statutory age) are caused by disability. This is equivalent to around 14% of the lifetime working capacity of the employed labour force.² Occupational injuries and diseases also affect unemployment and household income levels. Workers with an impairment of capacity can reduce their re-employability and impact household income. Workplace injuries and diseases typically reduce the overall earnings of households and in certain cases, family members have to give up jobs in order to care for an injured worker.

Sustainable economic growth creates the prosperity needed to sustain quality of life and ensures a higher standard of living. Sustainable economic performance can be achieved if growth pressures are properly addressed. The economy can also only be sustained if Alberta has the right people with the right skills at the right time to do the work.

Note 1.1

Research by the International Institute for Management Development and the World Economic Forum suggests that the safest-working countries also have the best competitiveness ratings (International Labour Organization, *Safety in Numbers – pointers for a global safety culture at work*, 2003).

Note 1.2

The International Labour Organization (ILO) estimates that approximately 4% of Gross Domestic Product is lost due to occupational injuries and diseases (ILO, *Safety in Numbers – pointers for a global safety culture at work*, 2003).

¹ See the Workers Compensation Board Alberta 2008 Premium Rate Manual http://www.wcb.ab.ca/pdfs/08rate_manual.pdf

² See the International Labour Organization report: *Safety in numbers – pointers for a global safety culture at work* http://www.ilo.org/public/english/protection/safework/worldday/report_eng.pdf

PROVINCIAL SUMMARY

The positive trend continues: there were fewer injuries reported and more person-years worked in 2007.

In recent years, improvements were made to the analysis of Workers' Compensation Board – Alberta (WCB) claim information allowing for modified work claims to be analyzed alongside lost-time claims. Using modified work claim data in addition to lost-time claim data ensures a more comprehensive picture of workplace injuries, and allows for greater insight into incident prevention.

A lost-time claim is a claim submitted to the WCB for an occupational injury or disease that causes a worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function (for example, hearing loss claims).

Note 2.1

- The lost-time claim rate represents the probability or risk of an injury or disease to a worker requiring time away from work, during a period of one year of work.
- The disabling injury rate represents the probability or risk of a disabling injury.

A modified work claim is submitted for an occupational injury or disease where workers have their normal work duties altered enabling them to remain working without losing time from work. Included in the figures are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease, and cases where workers were provided modified duties prior to time lost because of an injury or disease.

Modifying an injured worker's duties can be beneficial for both an employer and an employee. For the employer, the financial cost of an absent worker can be high and returning an injured employee to work as soon as it is medically possible is important for properly managing compensation, disability claims and productivity levels. For the employee, returning to work as soon as medically possible is beneficial both physically and psychologically, and is linked to quicker recovery rates and higher self-esteem. Long absences from the workplace are also linked to decreases in labor market attachment.

The number of disabling injury claims reflects both the lost-time and modified work concepts and produces an overall figure where an occupational injury or disease disables a worker causing either time lost from work or for normal work duties to be modified.

In 2007, a total of 34,227 lost-time claims were accepted by WCB. This is a decrease of 6.7% from 2006. In contrast, the person-years worked estimates increased by 3.3% to 1,611,892 between 2006 and 2007 (see Table 2.1). Expressed as a lost-time claim rate, the data translates into a rate of 2.12 per 100 person-years worked, a decrease of 9.7% from 2006, as proportionately there were fewer lost-time injury claims. The 2007 rate is the

lowest in the past seventeen years, and since 1991 the lost-time claim rate has decreased by 48.7%. Since 2003, the lost-time claim rate has decreased by 23.7%.

Table 2.1

Provincial Figures – Alberta: 2006 and 2007

	2006	2007	% Change
Person-years worked	1,560,078	1,611,892	3.3%
Lost-time claims	36,701	34,227	-6.7%
Lost-time claim rate	2.35	2.12	-9.7%
Modified-work claims	41,390	42,491	2.7%
Lost-time claims involving modified-work	13,566	14,245	5.0%
Disabling injury claims	64,525	62,473	-3.2%
Disabling injury rate	4.14	3.88	-6.3%
Duration rate	54	48	-12.0%
Days lost (LTC)	844,508	767,671	-9.1%
Compensation payments (LTC)	\$202,598,539	\$219,296,722	8.2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The total number of modified work claims submitted in 2007 was 42,491, an increase of 2.7%. There were 14,245 claims involving both lost-time and modified work, producing 62,473 disabling injury claims, a decrease of 3.2% from 2006. The number of lost-time claims involving modified work increased by 5.0% from 2006, indicative of improving claims management. Expressed as a rate, the 2007 disabling injury rate was 3.88 per 100 person-years worked, a decrease of 6.3% from the 2006 rate of 4.14.

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Three basic measures of severity are the duration rate, median days lost from work and average days lost from work. The severity of the injuries and diseases decreased in 2007, as reflected by a lower duration rate and a decrease in average days lost. The effort of employers to introduce modified work programs to integrate injured workers back into the workforce also has a positive impact on work days lost. The duration rate of 48 days lost per 100 person-years worked was 12.0% lower than in 2006. The median number of work days lost in 2007 was seven, the same as 2006, and the average days lost decreased to 22, from 23 in 2006.

Table 2.2 displays the lost-time claim and disabling injury figures and rates for the province, and also for the major industry sectors in Alberta. The data provides a useful setting for analyzing the health and safety performance of the Wholesale and Retail industries.

The 2007 lost-time claim rate for the Wholesale and Retail sector of 2.17 per 100 person-years worked was higher than the Mining and Petroleum Development sector and the Business, Personal and Professional Services sector, although lower than the other five major industry sectors. The disabling injury rate, 3.55 per 100 person-years worked, displays a similar pattern, being higher than the Mining and Petroleum Development

sector, the Business, Personal and Professional Services sector and the Public Administration, Education and Health Services sector but lower than the other four major industry sectors.

Table 2.2

Lost-Time Claim and Disabling Injury Rates by Major Industry Sector - Alberta: 2006 and 2007

Major Industry Sector	2006 2007			
	Lost-Time Claim Rate	Disabling Injury Rate	Lost-Time Claim Rate	Disabling Injury Rate
Alberta	2.35	4.14	2.12	3.88
Agriculture and Forestry	3.24	4.10	2.99	3.75
Business, Personal and Professional Services	1.54	2.05	1.30	1.86
Construction and Construction Trade Services	2.50	5.22	2.32	5.05
Manufacturing, Processing and Packaging	3.11	7.01	2.75	6.50
Mining and Petroleum Development	0.87	3.64	0.76	3.02
Public Administration, Education and Health Services	2.66	3.41	2.44	3.14
Transportation, Communication and Utilities	3.17	4.81	2.94	4.70
Wholesale and Retail	2.43	3.67	2.17	3.55

Data Source: WCB Data, Prepared by Data Development and Evaluation

INDUSTRY SECTOR SUMMARY

In 2007, the lost-time claim rate for the Wholesale and Retail sector was 2.17 per 100 person-years worked.

The Wholesale and Retail sector lost-time claim rate decreased in 2007 by 10.7% to 2.17 per 100 person-years worked, from 2.43 in 2006. The disabling injury rate decreased by 3.1%, to 3.55 per 100 person-years worked (see Table 3.1). The average lost-time claim rate for all sectors in the province was 2.12 per 100 person-years worked and the average disabling injury rate was 3.88 per 100 person-years worked.

The decreases in the 2007 lost-time claim and disabling injury rates for the Wholesale and Retail sector were the result of decreases in the number of lost-time and injury claims, though the number of person-years worked increased by 1.7% from the year 2006. The decrease in claims was a result of decreases in most of the sub-sectors.

Table 3.1

Wholesale and Retail Industries - Alberta: 2006 - 2007

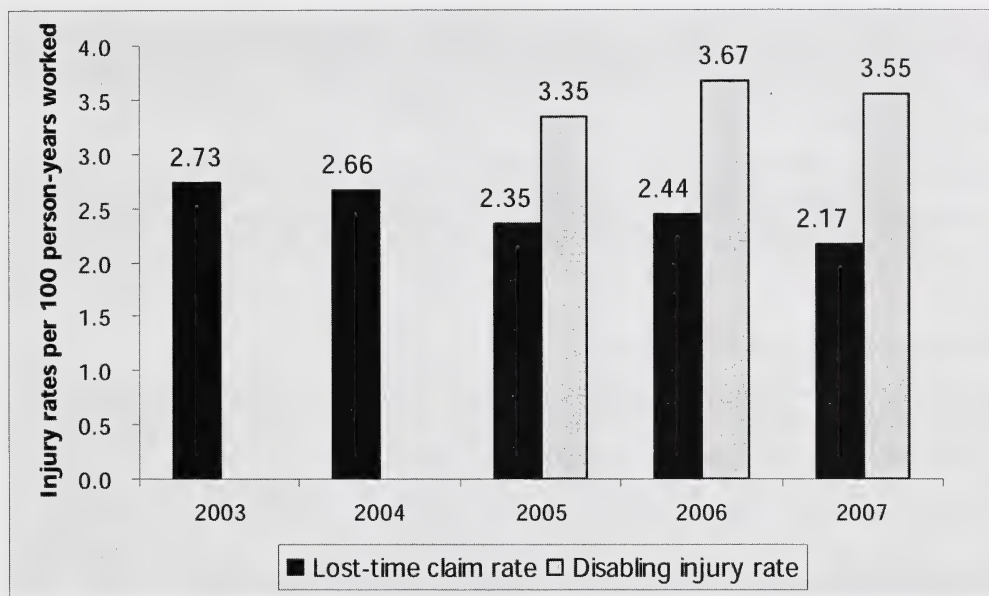
	2006	2007	% Change
Person-years worked	308,356	313,647	1.7%
Lost-time claims	7,501	6,816	-9.1%
Lost-time claim rate	2.43	2.17	-10.7%
Modified-work claims	6,778	7,288	7.5%
Lost-time claims involving modified work	2,965	2,955	-0.3%
Disabling injury claims	11,314	11,149	-1.5%
Disabling injury rate	3.67	3.55	-3.1%
Duration rate	44	35	-19.0%
Days lost (LTC)	135,011	111,272	-17.6%
Compensation payments (LTC)	\$28,566,754	\$28,136,518	-1.5%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Three basic measures of severity are the duration rate, median days lost from work and average days lost from work. The severity of injuries and diseases decreased in 2007, as reflected by a lower duration rate and a decrease in average days lost. The effort of employers to introduce modified work programs to integrate injured workers back into the workforce also has a positive impact on work days lost. In 2007, the Wholesale and Retail sector had a duration rate of 35, a 19.0% decrease from the 2006 rate of 44 and lower than the provincial rate of 48.

Since 2003 (see Chart 3.1), the lost-time claim rate for the Wholesale and Retail sector decreased by 20.4%.

Chart 3.1

Injury Rates for Wholesale and Retail Industries - Alberta: 2003 - 2007³

Data Source: WCB Data, Prepared by Data Development and Evaluation

Rates by Employer Size

In the Wholesale and Retail sector, employers with greater than 100 person-years worked had the highest lost-time claim rate at 2.67 per 100 person-years worked, followed by employers with 49 to 99 person-years worked, 2.00. Employers with less than 10 person-years worked had the lowest rate, 1.14 (see Table 3.2). Disabling injury rates were higher for employers with greater than 100 person-years at 4.76 per 100 person-years worked, followed by employers with 49 to 99 person-years worked at 2.96 per 100 person-years worked. Employers with more than 100 person-years worked had a disabling injury rate almost three times higher than employers with less than 10 person-years worked.

³ Disabling Injury Rates are available from 2004 onwards. The rate in 2004 was produced using a 27-month period to capture information on submitted claims in the 2004 calendar year. From 2005, a consistent 15-month period has been used to capture claims for particular years, in line with the methodology for the production of Lost-Time Claim Rates.

Table 3.2

**Lost-Time Claim and Disabling Injury Rate by Size of Employer-
Alberta: 2007**

Size of Employer	Number of Accounts	Person- Years	Lost-Time Claims	Disabling Injuries	Lost-time Claim Rate	Disabling Injury Rate
Less than 10 person-years worked	15,730	43,071	493	611	1.14	1.42
10 to 19 person-years worked	1,910	26,776	373	512	1.39	1.91
20 to 39 person-years worked	1,143	31,897	589	778	1.85	2.44
40 to 99 person-years worked	797	49,689	993	1,473	2.00	2.96
100 or more person-years worked	423	162,214	4,328	7,724	2.67	4.76
Unspecified	26	N/A*	40	51	N/A*	N/A*

* These are employers with no payroll information or with person-years worked equal to zero

Data Source: WCB Data, Prepared by Data Development and Evaluation

Distribution of Injury Claims

Table 3.3 presents figures for the proportion of employers in the Wholesale and Retail sector without lost-time claims or disabling injury claims in 2007. Table 3.4 displays figures for the number of claims submitted by employers.

Table 3.3

**Proportion of Employers with no Lost-Time or Disabling Injury
Claims - Wholesale and Retail Industries: 2007**

Proportion of Employers	With no Lost-Time Claims	With no Disabling Injury Claims
Wholesale and Retail	90%	89%

Data Source: WCB Data, Prepared by Data Development and Evaluation

For the Wholesale and Retail sector, 90% of employers had no lost-time claims and 89% of employers had no disabling injury claims, meaning the injuries and diseases are the results of incidents occurring at the operations of 10% of the employers (see Table 3.3). These figures however, are influenced by employer size. In 2007, the number of employers with no lost-time claims and the number of employers with no disabling injury claims translates to approximately 40% and 35% of the total person-years worked in the Wholesale and Retail sector respectively (see Table 4.10).

For employers with submitted claims, 60% submitted one lost-time claim, 32% two to five claims and around 8% six or more lost-time claims. For disabling injury claims, similar proportions exist although the number of employers submitting six or more disabling injury claims was 12% (see Table 3.4).

Table 3.4

Proportion of Employers with Claims - Wholesale and Retail Industries: 2007

1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
60%	32%	6%	2%
1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
56%	32%	9%	3%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Employers that submitted one to five lost-time claims and employers that submitted one to five disabling injury claims accounted for around 27% and 26% of the total person-years worked in the Wholesale and Retail sector respectively. Employers that submitted six or more lost-time and employers that submitted six or more disabling injury claims accounted for approximately 33% and 39% of the total person-years worked in the Wholesale and Retail sector.

INDUSTRY SECTOR ANALYSIS

Food and Beverage Stores and Yard and Home Improvement Centers have the highest lost-time claims of all the Wholesale and Retail Sectors.

Table 4.1 shows that lost-time claim rates have decreased for all the sub-sectors since 2003. For example, the Food and Beverage Stores sub-sector displayed a 26.0% decrease in the lost-time claim rate from the rate in 2003. This sub-sector had the highest lost-time claim rate in each year except in 2004 where the Automobiles, Sport Vehicles, Small Engines and Trailers sub-sector had a higher rate. The Office, Medical and Entertainment Equipment sub-sector had the lowest lost-time claim rate in each year. In 2007, the Office, Medical and Entertainment Equipment sub-sector experienced the lowest lost-time claim and disabling injury rates at 0.33 and 0.48 per 100 person-years respectively (see Chart 4.1).

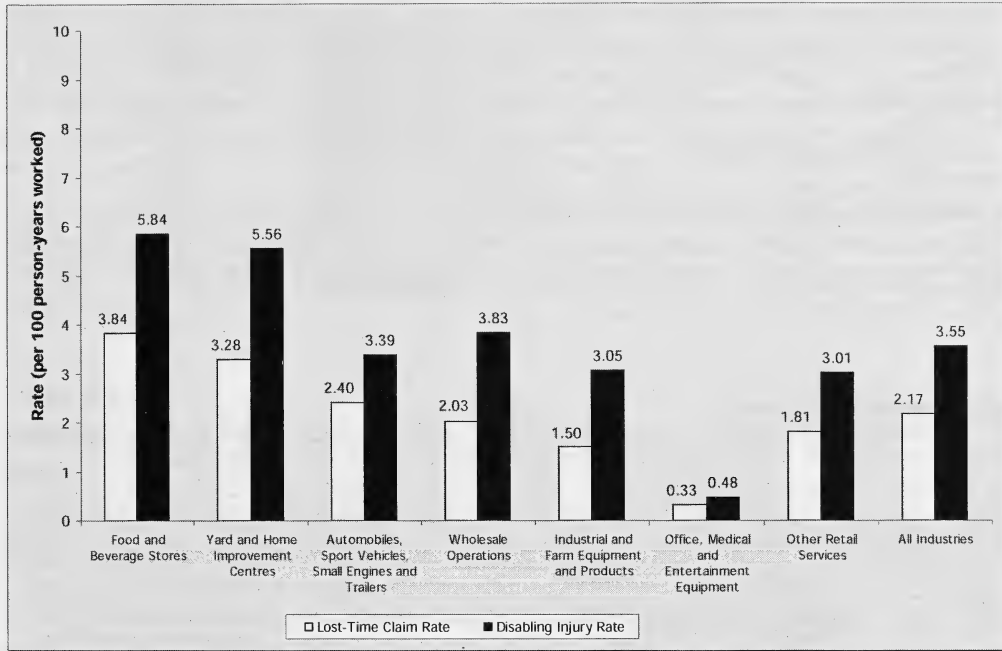
Table 4.1
Lost-Time Claim Rate by Wholesale and Retail Sub-Sector —
Alberta: 2003-2007

Sub-Sector	2003	2004	2005	2006	2007
Wholesale and Retail	2.73	2.66	2.35	2.43	2.17
Wholesale Operations	2.62	2.43	2.10	2.33	2.03
Food and Beverage Stores	5.20	4.73	4.50	4.73	3.84
Industrial and Farm Equipment and Products	2.08	1.69	1.64	1.82	1.50
Automobiles, Sport Vehicles, Small Engines and Trailers	3.04	5.46	2.69	2.58	2.40
Office, Medical and Entertainment Equipment	0.58	0.50	0.42	0.39	0.33
Yard and Home Improvement Centres	4.44	3.64	3.82	3.92	3.28
Other Retail Services	1.87	1.74	1.71	1.76	1.81

Data Source: WCB Data, Prepared by Data Development and Evaluation

Chart 4.1

Lost-Time Claim and Disabling Injury Rates by Wholesale and Retail Sub-Sector — Alberta: 2007



Data Source: WCB Data, Prepared by Data Development and Evaluation

Wholesale Operations

In 2007, the Wholesale Operations sub-sector had a lost-time claim rate of 2.03 per 100 person-years, slightly lower than the average rate for all sectors in the province. The disabling injury rate was 3.83, lower than the provincial rate of 4.14 per 100 person-years worked. The duration rate was 35 days lost per 100 person-years worked, a decrease of 15.3% from 2006 (see Table 4.2). Over the past five years, the lost-time claim rate for the Wholesale Operations sub-sector has fluctuated between a high of 2.62 in 2003 to a low of 2.03 per 100 person-years worked in 2007. The median and average days lost were six and 17.3 days per claim. The coinciding figures for all sectors in the province were seven and 22.

Table 4.2
Wholesale Operations — Alberta: 2006-2007

	2006	2007	% Change
Person-years worked	29,010	29,402	1.4%
Lost-time claims	675	596	-11.7%
Lost-time claim rate	2.33	2.03	-12.9%
Modified-work claims	737	835	13.3%
Lost-time claims involving modified work	306	306	0.0%
Disabling injury claims	1,106	1,125	1.7%
Disabling injury rate	3.81	3.83	0.4%
Duration rate	41	35	-15.3%
Days lost (LTC)	11,916	10,235	-14.1%
Compensation payments (LTC)	\$2,803,391	\$3,075,525	9.7%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Food and Beverage Stores

The lost-time claim rate for the Food and Beverage Stores sub-sector has decreased by 18.9% from 4.73 per 100 person-years in 2006 to 3.84 per 100 person-years in 2007. The disabling injury rate has also decreased by 10.7%. Both rates were the highest in the Wholesale and Retail sector. The duration rate was 56 days lost per 100 person-years in 2007, a 25.1% decrease from 2006 (see Table 4.3). The median days lost was six, one day shorter than the respective provincial figure. The average days lost per claim was 14.5, while the average figure for all sectors was 23, providing indications of a low severity of injury in this sub-sector.

Between 2003 and 2007, the lost-time claim rate in the Food and Beverage Stores sub-sector decreased by 26.0%, from 5.20 in 2003 to 3.84 per 100 person-years worked in 2007.

Table 4.3
Food and Beverage Stores — Alberta: 2006-2007

	2006	2007	% Change
Person-years worked	52,924	54,948	3.8%
Lost-time claims	2,502	2,108	-15.7%
Lost-time claim rate	4.73	3.84	-18.9%
Modified-work claims	2,172	2,186	0.6%
Lost-time claims involving modified work	1,212	1,083	-10.6%
Disabling injury claims	3,462	3,211	-7.3%
Disabling injury rate	6.54	5.84	-10.7%
Duration rate	75	56	-25.1%
Days lost (LTC)	39,432	30,659	-22.2%
Compensation payments (LTC)	\$7,506,179	\$7,029,496	-6.4%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Industrial and Farm Equipment and Products

In 2007, the lost-time claim rate for the Industrial and Farm Equipment and Products sub-sector was 1.50 per 100 person-years, below the provincial figure of 2.12. The disabling injury rate decreased 10.2%, from 3.40 in 2006 to 3.05 per 100 person-years worked in 2007. This decrease was the result of a 6.4% decrease in disabling injury claims and a 4.3% increase in person-years. The duration rate decreased by 12% from 38 days lost per 100 person-years worked in 2006 to 34 days lost per 100 person-years worked in 2007 (see Table 4.4). The median and average days lost were seven and 22.5. Both figures were almost equal to their respective figures for all sectors.

Over the past five years, the lost-time claim rate in the Industrial and Farm Equipment and Products sub-sector decreased by 27.8%. The rate decreased from 2.08 in 2003 to 1.50 per 100 person-years worked in 2007. The person-years worked grew by 25.9% since 2003.

Table 4.4

Industrial and Farm Equipment and Products — Alberta: 2006-2007

	2006	2007	% Change
Person-years worked	49,608	51,745	4.3%
Lost-time claims	905	778	-14.0%
Lost-time claim rate	1.82	1.50	-17.6%
Modified-work claims	1,049	1,080	3.0%
Lost-time claims involving modified work	269	280	4.1%
Disabling injury claims	1,685	1,578	-6.4%
Disabling injury rate	3.40	3.05	-10.2%
Duration rate	38	34	-12.0%
Days lost (LTC)	19,052	17,493	-8.2%
Compensation payments (LTC)	\$5,637,256	\$5,644,109	0.1%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Automobiles, Sport Vehicles, Small Engines and Trailers

In 2007, Automobiles, Sport Vehicles, Small Engines and Trailers sub-sector had a lost-time claim and disabling injury rate of 2.40 and 3.39 per 100 person-years worked, respectively. Both rates decreased by 7.0% and 3.8% from the rate in 2006 respectively. The duration rate was 41 per 100 person-years, a decrease of 28.0% from 2006 (see Table 4.5). The median and average days lost for this sub-sector were six and 17.1 respectively.

Table 4.5

Automobiles, Sport Vehicles, Small Engines and Trailers — Alberta: 2006-2007

	2006	2007	% Change
Person-years worked	48,022	48,441	0.9%
Lost-time claims	1,238	1,162	-6.1%
Lost-time claim rate	2.58	2.40	-7.0%
Modified-work claims	768	836	8.9%
Lost-time claims involving modified work	316	358	13.3%
Disabling injury claims	1,690	1,640	-3.0%
Disabling injury rate	3.52	3.39	-3.8%
Duration rate	57	41	-28.0%
Days lost (LTC)	27,399	19,909	-27.3%
Compensation payments (LTC)	\$5,593,259	\$5,062,057	-9.5%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Office, Medical and Entertainment Equipment

In 2007, the Office, Medical and Entertainment Equipment sub-sector's lost-time claim rate was 0.33 per 100 person-years worked, while the disabling injury rate was 0.48. Both were the lowest rates of all sub-sectors in the Wholesale and Retail sector. The duration rate decreased to 5 days lost per 100 person-years from 7 days lost per 100 person-years in 2006 (see Table 4.6). Its median and average days lost were also low, at 5.5 and 16.6. Both are lower than the provincial figures of seven and 22.

Between 2003 and 2007, the lost-time claim rate for the Office, Medical and Entertainment Equipment sub-sector did not rise above the 2003 figure of 0.58 per 100 person years, and has been the lowest in the Wholesale and Retail sector in the past five years.

Table 4.6

Office, Medical and Entertainment Equipment — Alberta: 2006-2007

	2006	2007	% Change
Person-years worked	26,032	25,324	-2.7%
Lost-time claims	102	84	-17.6%
Lost-time claim rate	0.39	0.33	-15.3%
Modified-work claims	53	64	20.8%
Lost-time claims involving modified work	24	27	12.5%
Disabling injury claims	131	121	-7.6%
Disabling injury rate	0.50	0.48	-5.1%
Duration rate	7	5	-16.6%
Days lost (LTC)	1,715	1,391	-18.9%
Compensation payments (LTC)	\$554,910	\$359,936	-35.1%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Yard and Home Improvement Centers

The Yard and Home Improvement Centers sub-sector had a lost-time claim rate of 3.28 per 100 person-years worked in 2007, a decrease of 16.3% from 2006. The disabling injury rate also decreased 8.3% to 5.6 per 100 person-years worked. This decrease was caused by an 11.6% increase in person-years even though the disabling injury rate has also increased by 2.4%. The duration rate was 57 days lost per 100 person-years worked (see Table 4.7). The median days lost was five, while the average days lost was 17.2. Both numbers were lower than their coinciding figure for all sectors, indicating a lower severity of injury in this sub-sector.

Between 2003 and 2007, the lost-time claim rate for the Yard and Home Improvement Centers sub-sector has decreased by 26.0%, from 4.44 to 3.28 per 100 person-years, a result of person-years increasing by 30.4%.

Table 4.7

Yard and Home Improvement Centers — Alberta: 2006-2007

	2006	2007	% Change
Person-years worked	12,467	13,915	11.6%
Lost-time claims	489	457	-6.5%
Lost-time claim rate	3.92	3.28	-16.3%
Modified-work claims	483	531	9.9%
Lost-time claims involving modified work	217	215	-0.9%
Disabling injury claims	755	773	2.4%
Disabling injury rate	6.06	5.56	-8.3%
Duration rate	60	57	-5.5%
Days lost (LTC)	7,510	7,924	5.5%
Compensation payments (LTC)	\$1,475,352	\$1,739,715	17.9%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Other Retail Services

The lost-time claim rate for Other Retail Services sub-sector was 1.81 per 100 person-years worked in 2007, while the disabling injury rate was 3.01 per 100 person-years worked. Both figures were below the provincial figures of 2.12 and 3.88 per 100 person-years worked. The duration rate was 26 days lost per 100 person-years worked (see Table 4.8). The median and average days lost were five and 14.5. Both figures were lower than their coinciding figures for all sectors.

Over the past five years, the lost-time claim rate for these industries has decreased from 1.87 in 2003 to 1.81 per 100 person-years in 2007.

Table 4.8
Other Retail Services — Alberta: 2006-2007

	2006	2007	% Change
Person-years worked	90,293	89,873	-0.5%
Lost-time claims	1,590	1,631	2.6%
Lost-time claim rate	1.76	1.81	3.1%
Modified-work claims	1,516	1,756	15.8%
Lost-time claims involving modified work	621	686	10.5%
Disabling injury claims	2,485	2,701	8.7%
Disabling injury rate	2.75	3.01	9.2%
Duration rate	31	26	-15.1%
Days lost (LTC)	27,987	23,661	-15.5%
Compensation payments (LTC)	\$4,996,406	\$5,225,680	4.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Distribution of injury claims

Table 4.9 presents figures for the proportion of employers without lost-time or disabling injury claims in 2007, by sub-sector. Table 4.10 presents the respective person-years worked for these employers in 2007. Table 4.11 displays figures for the number of claims submitted by employers.

Table 4.9
Proportion of Employers with no Lost-Time or Disabling Injury Claims, by Wholesale and Retail Sub-Sector - Alberta: 2007

Proportion of Employers by Sub-Sector	With no Lost-Time Claims	With no Disabling Injury Claims
Wholesale and Retail	90%	89%
Wholesale Operations	85%	83%
Food and Beverage Stores	93%	92%
Industrial and Farm Equipment and Products	91%	89%
Automobiles, Sport Vehicles, Small Engines and Trailers	85%	83%
Office, Medical and Entertainment Equipment	97%	96%
Yard and Home Improvement Centres	76%	71%
Other Retail Services	93%	92%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The Office, Medical, and Entertainment Equipment sub-sector had higher proportions of employers with no lost-time or disabling injury claims than the average for the Wholesale and Retail sector. The Food and Beverage Stores sub-sector and the Other Retail Services sub-sector also had higher proportions of employers with no claims. These figures,

however, are influenced by employer size. In 2007, the number of employers with no lost-time claims translates to approximately 68%, 18% and 41% of the total person-years worked in these sub-sectors respectively (see Table 4.10).

Table 4.10
Proportion of Person-years worked accounted for by Employers with no Lost-Time or Disabling Injury Claims, by Wholesale and Retail Sub-Sector - Alberta: 2007

Proportion of person-years worked accounted for by employers	With no Lost-Time Claims	With no Disabling Injury Claims
Wholesale and Retail	40%	35%
Wholesale Operations	44%	39%
Food and Beverage Stores	18%	17%
Industrial and Farm Equipment and Products	46%	33%
Automobiles, Sport Vehicles, Small Engines and Trailers	44%	40%
Office, Medical and Entertainment Equipment	68%	65%
Yard and Home Improvement Centres	21%	15%
Other Retail Services	41%	39%

Data Source: WCB Data, Prepared by Data Development and Evaluation

For employers who did submit claims, the Office, Medical and Entertainment Equipment sub-sector and Automobiles, Sport Vehicles, Small Engines and Trailers sub-sector had the highest proportion of employers submitting one lost-time and disabling injury claim. The Food and Beverage Stores and Yard and Home Improvement Centers sub-sectors had the lowest proportion of employers submitting one lost-time and disabling injury claim. The Food and Beverage Stores sub-sector had the highest proportion submitting more than six lost-time and disabling injury claims (see Table 4.11).

Table 4.11

Proportion of Employers with Lost-Time or Disabling Injury Claims, by Wholesale and Retail sub-sector - Alberta: 2007

Sub-Sector	1 Lost-Time Claim	2 to 5 Lost-Time Claims	6 to 20 Lost-Time Claims	Over 20 Lost-Time Claims
Wholesale Operations	59%	33%	6%	2%
Food and Beverage Stores	54%	31%	9%	6%
Industrial and Farm Equipment and Products	63%	32%	5%	0%
Automobiles, Sport Vehicles, Small Engines and Trailers	64%	32%	4%	0%
Office, Medical and Entertainment Equipment	64%	34%	2%	0%
Yard and Home Improvement Centres	54%	34%	7%	6%
Other Retail Services	56%	31%	10%	2%

Sub-Sector	1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
Wholesale Operations	54%	33%	9%	4%
Food and Beverage Stores	50%	30%	11%	8%
Industrial and Farm Equipment and Products	57%	31%	9%	2%
Automobiles, Sport Vehicles, Small Engines and Trailers	60%	32%	7%	0%
Office, Medical and Entertainment Equipment	60%	36%	2%	2%
Yard and Home Improvement Centres	49%	37%	8%	6%
Other Retail Services	55%	30%	11%	4%

Data Source: WCB Data, Prepared by Data Development and Evaluation

DEMOGRAPHICS OF INJURED WORKERS

Injured Worker Characteristics

In 2007, Sales and service occupations accounted for 19.8% of total lost-time claims, 19.1% of disabling injuries and 14.1% of those employed in the Wholesale and Retail sector. The Trades helpers, construction, and transportation laborers and related occupations had the largest separation between proportions of claims and employment with 11.0% of lost-time claims, 12.7% of disabling injury claims and 4.2% of those employed (see Table 5.1).

Table 5.1
Lost-Time and Disabling Injury Claims by Selected Occupation
Group — Alberta: 2007

Occupation Group	Lost-time Claims	Disabling Injury Claims	Employment
Sales & Service Occupations N.E.C.	19.8%	19.1%	14.1%
Retail Salespersons and Sales Clerks	15.6%	14.5%	22.2%
Clerical Occupations	10.7%	11.4%	8.7%
Trades Helpers, Construction, and Transportation Labourers and Related Occupations	11.0%	12.7%	4.2%
Mechanics	11.5%	11.3%	4.5%
Transportation Equipment Operators and Related Workers, Excl. Labourers	6.8%	6.0%	2.3%
Cashiers	4.4%	4.3%	8.5%
All Other Occupations	20.2%	20.7%	35.5%

Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada, Labour Force Survey (Microdata Files)

In 2007, young workers aged 15 to 24 accounted for 25.1% of lost-time claims and 28.9% of disabling injury claims. However, both these numbers are below the estimated number of young workers employed in the Wholesale and Retail sector, at 31.0% (see Table 5.2).⁴

⁴ Statistics Canada, Labour Force Survey (Microdata Files) for the Wholesale and Retail Trade.

Table 5.2

Lost-Time and Disabling Injury Claims by Age — Alberta: 2006-2007

Age	2006				2007			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
15-19 Years	756	10.1%	1,291	11.4%	673	9.9%	1,280	11.5%
20-24 Years	1,204	16.1%	2,008	17.8%	1,038	15.2%	1,933	17.4%
25-34 Years	1,752	23.4%	2,689	23.8%	1,518	22.3%	2,606	23.4%
35-44 Years	1,671	22.3%	2,409	21.3%	1,497	22.0%	2,326	20.9%
45-54 Years	1,433	19.1%	2,002	17.7%	1,354	19.9%	1,992	17.9%
55-64 Years	570	7.6%	776	6.9%	606	8.9%	848	7.6%
65+ Years	105	1.4%	121	1.1%	121	1.8%	150	1.3%
Unspecified	10	N/A	18	N/A	9	N/A	14	N/A
Total	7,501	100.0%	11,314	100.0%	6,816	100.0%	11,149	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

In 2007, women and men were almost equally likely to be employed in the Wholesale and Retail sector (48.5% compared to 51.5%, respectively).⁵ However, men accounted for 62.8% of lost-time claims and 65.1% of disabling injuries, while women represented only 37.2% of lost-time claims and 34.9% of disabling injuries (see Table 5.3). This difference is likely the result of the different types of work women and men perform and the gender delineated attitudes and roles they bring to the workplace.⁶

Table 5.3

Lost-Time and Disabling Injury Claims by Gender — Alberta: 2006-2007

Gender	2006				2007			
	Lost-Time Claims	%	Disabling Injury Claims	%	Lost-Time Claims	%	Disabling Injury Claims	%
Women	2,608	35.3%	3,824	34.3%	2,497	37.2%	3,828	34.9%
Men	4,771	64.7%	7,324	65.7%	4,215	62.8%	7,150	65.1%
Unspecified	122	N/A	166	N/A	122	N/A	166	N/A
Total	7,501	100.0%	11,314	100.0%	6,834	100.0%	11,144	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

⁵ Statistics Canada, Labour Force Survey (Microdata Files)

⁶ See the Occupational Injuries and Diseases in Alberta 2007 Summary

INJURY AND DISEASE ANALYSIS

Overexertion was the most common cause for lost-time claims in the Wholesale and Retail sector. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

Nature of Injury or Disease

The nature of injury is used to identify the physical characteristics of the injury or disease. In 2007, 92.7% of lost-time and 93.1% of disabling injury claims were traumatic injuries and disorders. The four most common traumatic injuries and disorders were: sprains, strains and tears, surface wounds and bruises, open wounds and fractures and dislocations (see Table 6.1).

Most nature of injury categories in the Wholesale and Retail sector happened at a lower or similar relative frequency to that of the rest of the province.⁷ The largest difference was found in burns, which had a relative lost-time claim frequency that was 0.7 times the relative frequency for all sectors in the province. The disabling injury claim frequency was 0.6 times the frequency for all sectors.

Note 6.1

Throughout this section, the classifications used are based on the Canadian Standards Association (CSA) standards for categorizing occupational injury and disease information.

Note 6.2

The CSA standard is designed so that Nature of Injury and Part of Body categories are directly linked when classifying injuries. This is also true for the relationship between the Source of Injury and Type of Event categories.

⁷ Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.1
Nature of Injury or Disease — Alberta: 2007

Nature of Injury	Lost-Time Claims	%	Disabling Injury claims	%
Traumatic Injuries and Disorders	6,318	92.7%	10,385	93.1%
Sprains, Strains and Tears	3,376	49.5%	5,563	49.9%
Surface Wounds and Bruises	894	13.1%	1,475	13.2%
Open Wounds	594	8.7%	1,204	10.8%
Fractures and Dislocations	458	6.7%	664	6.0%
Burns	118	1.7%	171	1.5%
Other Traumatic Injuries and Disorders	878	12.9%	1,308	11.7%
Systemic Diseases and Disorders	261	3.8%	391	3.5%
Infectious and Parasitic Disorders	0	0.0%	0	<0.1%
Neoplasms, Tumors and Cancer	1	0.0%	1	0.0%
Symptoms, Signs and Ill-Defined Conditions	19	0.3%	32	0.3%
Multiple Diseases, Conditions and Disorders	0	0.0%	0	0.0%
Other Diseases, Conditions and Disorders	11	0.2%	14	0.1%
Nature of Injury - Unknown	206	3.0%	326	2.9%
Total	6,816	100.0%	11,149	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Part of Body Injured

In 2007, the trunk accounted for most injured body parts, at 40.6% of lost-time and 39.1% of disabling injuries in the Wholesale and Retail sector, followed by upper extremities, at 22.8% and 27.9%, and lower extremities, at 20.6% and 19.4% (see Table 6.2).

Most part of body categories happened at a similar or lower relative frequency in the Wholesale and Retail sector than in the rest of the province. The body systems category had a lower relative frequency of lost-time and disabling injury claims as both figures were 0.3 times the frequency for all sectors in the province.⁸

⁸ Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.2
Part of Body Injured — Alberta: 2007

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	2,815	40.6%	4,355	39.1%
Back, Including Spine, Spinal Cord	1,966	28.3%	2,919	26.2%
Other Trunk	849	12.2%	1,436	12.9%
Upper Extremities	1,585	22.8%	3,115	27.9%
Wrist(s) and Hand(s) Except Finger(s)	689	9.9%	1,200	10.8%
Finger(s), Fingernail(s)	529	7.6%	1,161	10.4%
Other Upper Extremities	367	5.3%	754	6.8%
Lower Extremities	1,432	20.6%	2,165	19.4%
Ankle(s) and Foot (Feet) Except Toes	689	9.9%	1,035	9.3%
Leg(s)	635	9.1%	966	8.7%
Other Lower Extremities	108	1.6%	164	1.5%
Head	523	7.5%	680	6.1%
Eye(s)	183	2.6%	235	2.1%
Other Head Parts	340	4.9%	445	4.0%
Neck, Including Throat	149	2.1%	209	1.9%
Body Systems	21	0.3%	29	0.3%
Multiple Body Parts	406	5.8%	578	5.2%
Part of Body - Unknown	8	0.1%	13	0.1%
Other Body Parts	2	0.0%	5	0.0%
Total	6,941	100.0%	11,149	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Source of Injury or Disease

The source of injury or disease describes the object or substance that the worker came into contact with resulting in an injury or disease. The two primary sources of injury for the lost-time and disabling injury claims in the Wholesale and Retail sector in 2007 were persons, plants, animals, and minerals, at 19.3% and 18.9% and containers, at 19.3% and 19.8% respectively (see Table 6.3).

In the Wholesale and Retail sector most sources of injury categories happened at a similar or lower frequency than in the rest of the province. The mineral – metallic or nonmetallic (except fuel) category had a lower frequency of lost-time and disabling injury claims at 0.1 and 0.3 times the relative frequency for all sectors in the province respectively.⁹ The source of injury category hand tools – powered was also 0.5 times the lost-time and disabling injury claim relative frequency for all sectors.

⁹ Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.3

Source of Injury or Disease — Alberta: 2007

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Persons, Plants, Animals and Minerals	1,346	19.3%	1,884	18.9%
Person-Injured or Ill Worker	1,229	17.7%	1,728	17.4%
Minerals - Metallic or Nonmetallic (except fuel)	2	0.0%	13	0.1%
Person-Other Than Injured or Ill Worker*	39	0.6%	45	0.5%
Other Persons, Plants, Animals & Minerals	76	1.1%	98	1.0%
Containers**	1,345	19.3%	1,971	19.8%
Structures and Surfaces	894	12.8%	1,138	11.4%
Parts and Materials	665	9.6%	1,046	10.5%
Vehicles	504	7.2%	668	6.7%
Machinery	550	7.9%	794	8.0%
Tools, Instruments and Equipment	372	5.3%	643	6.5%
Hand Tools - Nonpowered	248	3.6%	441	4.4%
Hand Tools - Powered	35	0.5%	61	0.6%
Other Tools and Equipments	89	1.3%	141	1.4%
Furniture and Fixtures	342	4.9%	475	4.8%
Chemicals and Chemical Products	74	1.1%	90	0.9%
Other Sources	275	3.9%	358	3.6%
Source of Injury - Unknown	596	8.6%	883	8.9%
Total	6,963	100.0%	9,950	100.0%

* Person – other than injured or ill worker: classifies workplace injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.

** Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.)

Data Source: WCB Data, Prepared by Data Development and Evaluation

Type of Event or Exposure

The type of event or exposure describes the incident that occurred at the time of the exposure that directly resulted in the injury or disease. Bodily reaction and exertion, and contact with objects and equipment were the two most common types of events or exposures that comprised 73.0% of lost-time claims and 85.0% of disabling injury claims in the Wholesale and Retail sector in 2007 respectively (see Table 6.4).

Most type of event or exposure categories in the Wholesale and Retail sector happened at a lower or similar relative frequency to that of the rest of the province. The largest difference was found in other contact with objects or equipments category, which had a lost-time and disabling injury claim relative frequency of 1.5 and 1.3 times the frequency for all sectors in the province respectively.¹⁰

¹⁰ Number of times higher or lower compares the Wholesale and Retail sector's claim rate and proportion of injuries by each injury type, against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.4
Type of Event or Exposure — Alberta: 2007

Type of Event or Exposure	Lost-Time Claims	%	Disabling Injuries	%
Bodily Reaction or Exertion	3,018	44.3%	4,976	44.5%
Overexertion	1,749	25.7%	2,901	25.9%
Bodily Reaction*	845	12.4%	1,326	11.9%
Repetitive Motion	258	3.8%	458	4.1%
Other Bodily Reaction/Exertion	166	2.4%	291	2.6%
Contact with Objects or Equipment	1,956	28.7%	3,521	31.5%
Struck by Object	1,082	15.9%	1,940	17.3%
Struck against Object	420	6.2%	718	6.4%
Caught in Object	300	4.4%	590	5.3%
Rubbed or Abraded	67	1.0%	99	0.9%
Other Contact with Object/Equipment	87	1.3%	174	1.6%
Falls	1,018	14.9%	1,459	13.0%
Fall on Same Level	701	10.3%	1,015	9.1%
Fall to Lower Level	247	3.6%	332	3.0%
Other Falls	70	1.0%	112	1.0%
Transportation Accidents	306	4.5%	424	3.8%
Exposure to Harmful Substances	179	2.6%	278	2.5%
Assaults and Violent Acts	37	0.5%	44	0.4%
Assaults and Violent Acts by Person(s)	30	0.4%	36	0.3%
Other Assaults and Violent Acts	7	0.1%	8	0.1%
Fires and Explosions	17	0.2%	22	0.2%
Other Events or Exposures	0	0.0%	1	0.0%
Type of Event - Unknown	285	4.2%	463	4.1%
Total	6,816	100.0%	11,188	100.0%

* Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.

Data Source: WCB Data, Prepared by Data Development and Evaluation

Duration of Disability

Duration of disability¹¹ is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, the efforts of employers to introduce modified work programs to integrate injured workers more quickly back into the workforce can have a major impact on workdays lost.

Over half of the claims resulted in a duration of disability of 10 days or less. Claims with one to five days' duration represented 46.9% of all claims, and claims with six to ten days' duration accounted for 15.3%. Claims resulting in duration of disability of 51 days or more represented 8.0% of all claims (see Table 6.5). In all sectors in the province, 55.6% of lost-time claims resulted in 1-10 days lost, while 21.0% of claims required 31 or more days away from work.

Table 6.5
Duration of Disability — Alberta: 2006-2007

Duration of Disability	2006		2007	
	Lost-Time Claims	%	Lost-Time Claims	%
1-5 Days	3,358	44.8%	3,200	46.9%
6-10 Days	1,158	15.4%	1,040	15.3%
11-15 Days	559	7.5%	515	7.6%
16-20 Days	379	5.1%	315	4.6%
21-30 Days	505	6.7%	418	6.1%
31-40 Days	327	4.4%	293	4.3%
41-50 Days	214	2.9%	203	3.0%
51 Days or More	703	9.4%	548	8.0%
Unspecified	298	4.0%	284	4.2%
Total	7,501	100.0%	6,816	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

¹¹ The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

OCCUPATIONAL FATALITIES

In 2007 the WCB accepted ten fatalities in the Wholesale and Retail industries, accounting for 6.5% of all 154 fatalities in the province.

A WCB accepted occupational fatality is defined as the death of a worker resulting from a work-related incident or exposure which has been accepted by the WCB for compensation. The WCB classifies occupational fatalities into three general types as follows:

Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft, train, helicopter and water vehicle crashes. In 2007, three of the Wholesale and Retail fatalities accepted by WCB were motor vehicle incidents (see Table 7.1).

Workplace Incidents

Workplace incidents consist of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that E&I typically investigates. In 2007, five of the Wholesale and Retail fatalities accepted by WCB were workplace incidents (see Table 7.1).

Latent Workplace and Motor Vehicle Fatalities

Latent fatalities consist of workers who were involved in a workplace incident or exposure, or a motor vehicle incident that did not become a fatality until a much later date, often years later. These incidents were classified as occupational diseases. From 2007, these incidents will be separated out and included with either motor vehicle or workplace incident categories in accordance to their original injury.

Usually, other contributing factors cause a latent fatality, although these contributing factors are the result of the initial injury or exposure. A motor vehicle incident where a worker received leg injuries requiring surgery is a good example of this. Complications during the surgery result in a blood clot causing a fatal stroke. Thus, the injury is classified latent because the original injury caused the requirement for surgery. In 2007 there was one latent workplace incident in the Wholesale and Retail industries.

Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational disease, that is, disease known to be primarily or exclusively work-related such as asbestosis and coal workers' pneumoconiosis. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.*

Each year the WCB accepts some occupational fatality claims for compensation. Occupational fatality claims that were accepted in a particular year may include fatalities from prior years. In 2007, two of the fatalities accepted by WCB in the Wholesale and Retail industries were occupational disease incidents (see Table 7.1).

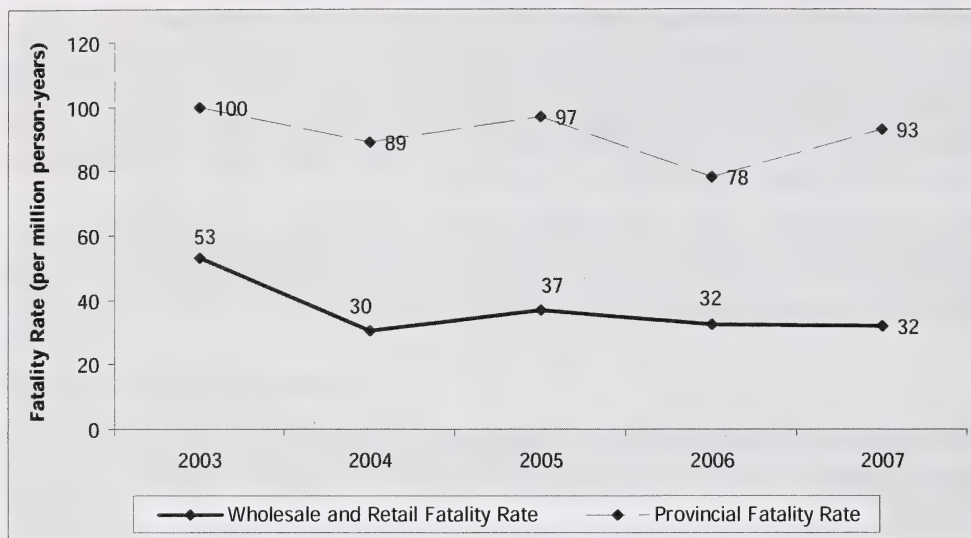
Table 7.1
Types of Occupational Fatalities Accepted by the WCB -
Alberta: 2003 - 2007

Year	Motor Vehicle Incident		Workplace Incident		Occupational Disease		Total
	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2003	4	30.8%	4	30.8%	5	38.5%	13
2004	4	50.0%	1	12.5%	3	37.5%	8
2005	4	36.4%	6	54.5%	1	9.1%	11
2006	2	20.0%	4	40.0%	4	40.0%	10
2007	3	30.0%	5	50.0%	2	20.0%	10
Total	17	32.7%	20	38.5%	15	28.8%	52

Data Source: 2007 WCB Data, Prepared by Data Development and Evaluation

The fatality rate is calculated by dividing the number of accepted fatalities in the year by the number of person-years worked in that year. The result is expressed as "per million person-years worked." The 2007 fatality rate was 32 per million person-years worked, the same rate as the 2006 (see Chart 7.1).

Chart 7.1

Fatality Rate¹² in Wholesale and Retail Industries: 2003-2007

Data Source: WCB Data, Prepared by Data Development and Evaluation

¹² Estimates are based upon information provided by the WCB. Fatalities occurring under Government of Canada jurisdiction are excluded from the calculation of the fatality rates.

Between 2003 and 2007, the WCB accepted 52 fatalities in the Wholesale and Retail industries. The Industrial and Farm Equipment and Products sub-sector had the most with 23 fatalities, accounting for 44.2% of total fatalities (see Table 7.2). In the past five years, only one fatality has been reported in the Office, Medical and Entertainment Equipment sub-sector.

Table 7.2

**Wholesale and Retail Occupational Fatalities Accepted by the WCB
by Sub-Sector - Alberta: 2003-2007**

Sub-Sector	2003	2004	2005	2006	2007	Number of Fatalities	%
Automobiles, Sport Vehicles, Small Engines and Trailers	2	1	1	2	2	8	15.4%
Food and Beverage Stores	2	0	2	1	1	6	11.5%
Industrial and Farm Equipment and Products	5	2	6	5	5	23	44.2%
Other Retail Services	1	2	1	0	0	4	7.7%
Wholesale Operations	2	3	0	0	2	7	13.5%
Yard and Home Improvement Centres	1	0	1	1	0	3	5.8%
Office, Medical and Entertainment Equipment	0	0	0	1	0	1	1.9%
Wholesale and Retail Industries	13	8	11	10	10	52	100.0%

Data Source: 2007 WCB Data, Prepared by Data Development and Evaluation

CERTIFICATE OF RECOGNITION

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are issued by Certifying Partners and are co-signed by E&I.¹³

In 2007, about three percent of Wholesale and Retail sector's employers were COR holders. These employers represented 23.8% of the total person-years worked in the Wholesale and Retail sector. In 2007, 7.5% of Industrial and Farm Equipment and Products employers had valid CORs, representing 43.7% of the total person-years worked in that sub-sector (see Table 8.1).

Table 8.1
Employers With Valid COR — Alberta: 2007

Sub-Sector	Number of Certified Employers	Total Number of Employers	% of Total Employers Certified	% of Total Person-Years Certified
Wholesale and Retail	571	20,029	2.9%	23.8%
Automobiles, Sport Vehicles, Small Engines and Trailers	141	3,894	3.6%	12.0%
Food and Beverage Stores	17	2,682	0.6%	39.6%
Industrial and Farm Equipment and Products	327	4,378	7.5%	43.7%
Office, Medical and Entertainment Equipment	6	1,446	0.4%	2.9%
Wholesale Operations	27	1,510	1.8%	15.9%
Yard and Home Improvement Centres	23	365	6.3%	10.8%
Other Retail Services	30	5,754	0.5%	44.3%

Data Source: WCB Data, Prepared by Data Development and Evaluation

¹³ For more information on the COR program visit www.employment.alberta.ca

In 2007, the lost-time claim rate for COR holders in the Wholesale and Retail sector decreased by 12.2% and the rate for non-COR holders decreased by 11.7%. The disabling injury rates for both COR and non-COR employers decreased by 3.9% and 6.6%, respectively (see Table 8.2). For all sectors in the province, the lost-time claim and disabling injury rates for COR holders were 2.19 and 5.19 per 100 person-years respectively, for non-COR holders the respective numbers were 2.08 and 2.93. A low lost-time claim rate and high disabling injury rate can be indicative of proficient claims management. However, it may also be a reflection of larger employers having greater capacity to offer modified duties to injured workers than smaller employers.

Comparing COR holders against all non-COR holders provides useful information about each group, although it does not compare like-with-like. A COR is given to employers who develop health and safety programs that meet established standards, with this group seeing continued improvement in their lost-time claim rates. Some non-COR holders have good programs in place above this standard, whereas others do not. This makes evaluating improving health and safety trends less clear for this group.

Table 8.2
Lost-Time Claim and Disabling Injury Rates for Wholesale and Retail COR Holders — Alberta: 2006-2007

Employer	Year	Number of Accounts	Person-Years	Lost-Time Claims	Disabling Injury Claims	Lost-Time Claim Rate	Disabling Injury Rate	Change in Lost-Time Claim Rate	Change in Disabling Injury Rate
COR	2006	457	63,406	1,950	3,786	3.08	5.97	-12.2%	-3.9%
	2007	571	74,502	2,015	4,276	2.70	5.74		
Non-COR	2006	19,829	244,950	5,551	7,528	2.27	3.07	-11.7%	-6.6%
	2007	19,458	239,144	4,801	6,873	2.00	2.87		

Data Source: WCB Data, Prepared by Data Development and Evaluation

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APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

Modified Work Claim

A modified work claim is a claim for an occupational injury or disease where a worker had their normal work duties altered to enable them to remain working without losing time from work. Also included are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease.

Disabling Injury Claim

Disabling injury (DI) claims combine both the lost-time and modified work concepts to produce an overall figure where an occupational injury or disease disables the worker causing either time-lost from work or for their normal work duties to be modified.

Person- Years Worked

Person-years worked are estimates calculated from wage and payroll data provided by account holders to the WCB. Alberta Employment and Immigration uses data to estimate an average industry wage, and uses the average industry wage and employer payroll data to estimate person-years worked for each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

Lost-Time Claim Rate

The lost-time claim rate is calculated by dividing the number of lost-time claims by the person-years worked estimate, and multiplying the result by 100. The lost-time claim rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, which will result in time lost from work. Comparisons of lost-time claim rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTC's} \times 100}{\text{Person-years worked}}$$

Disabling Injury Rate

The disabling injury rate is calculated by dividing the number of disabling injury claims by the person-year estimates, and multiplying the result by 100. The disabling injury rate represents the probability or risk of a disabling injury or disease to a worker during a period of one year of work. The disabling injury rate is similar to the LTC rate although it covers a broader range of injuries, including those that are less severe in nature (do not require time away from work). The rate represents the number of claims per 100 person-years worked and includes claims made for both lost-time and modified work.

$$\text{Disabling Injury Rate} = \frac{\text{Number of DI's} \times 100}{\text{Person-years worked}}$$

Duration (Days lost)

The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Employment and Immigration obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease, although it provides a consistent method for reporting and observing trends in duration.

Duration Rate

The duration rate is calculated by dividing the number of workdays lost (disability days) by the person-years worked estimate, and multiplying by 100. The result is expressed as days lost per 100 person-years worked, and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

$$\text{Duration Rate} = \frac{\text{Disability Days} \times 100}{\text{Person-years worked}}$$

Industry Coverage

About 80% of employed persons in Alberta are covered by WCB. This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as some industries where WCB coverage is not compulsory.

**WCB
Accepted
Fatality**

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

Fatality Rate

The fatality rate is calculated by dividing the number of accepted fatalities by the person-years worked estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years worked. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

$$\text{Fatality Rate} = \frac{\text{Number of Fatalities} \times 1,000,000}{\text{Person-years worked}}$$

**Number of
Times
Higher/Lower
than the
Provincial
Average**

The number of times higher/lower than the provincial average is used to compare the performance of the industries with the province regarding specific injury or disease. A number less than one indicates that the injury of the industries is lower than the provincial average; if equal to one it indicates the injury of the industries is the same as the provincial average and a number greater than one indicates that the injury of the industries is higher than the provincial average.

$$\frac{\text{Per cent of Total Claims for the Industries}}{\text{Per cent of Total Claims for the Province}} \times \frac{\text{Industries' LTC Rate}}{\text{Provincial LTC Rate}}$$

Where:

$$\frac{\text{Per cent of Total Claims for the Industries} = \frac{\text{Number of LTCs for the Industries (e.g. back injury)} \times 100}{\text{Total LTCs for the Industries}}}{\text{Per cent of Total Claims for the Province} = \frac{\text{Number of LTCs for the Province (e.g. back injury)} \times 100}{\text{Total LTCs for the Province}}}$$

**Labour
Force
Survey**

The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. The objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications (employed, unemployed, and not in the labour force) and to provide descriptive and explanatory data on each of these categories. Data from the survey provide information on major labour market trends such as shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates.

For the most part, annual LFS data has been analyzed alongside injury and disease information to aid the understanding of injury risk or frequency by worker type. The LFS uses a different industry classification from WCB, although there are similarities in structure. Where possible, the two data sources are used comparably and proportions (of totals) have been used to evaluate information generated from both sources. Using proportions attempts to overcome obvious distortions in the numbers in employment from both sources, although the impact on the proportions from industry coverage differences is unclear. In certain instances, monthly LFS micro-data files have been combined and used to produce proportion estimates for the whole year for particular sub-groups of the population.

For further information on the LFS, please see <http://employment.alberta.ca>.

APPENDIX B: WHOLESALE AND RETAIL INDUSTRIES WCB INDUSTRY CODES

1. Wholesale Operations

- 62900 – Wholesale with or without Warehousing
- 69916 – Wholesale Food Distribution

2. Food and Beverage Stores

- 63100 – Food/Convenience Stores
- 63103 – Butcher Shops/Home Provisioners
- 63105 – Liquor/Wine/Beer Sales Outlets
- 65406 – Gas Bar/Car Wash – No Auto Service

3. Industrial and Farm Equipment and Products

- 37902 – Chemical Products – Packaging/Distribution
- 52400 – Grain/Seed Handling Operations
- 60800 – Bulk Petroleum Dealers
- 62200 – Farm Implement Dealers
- 62201 – Mobile Equipment Dealers
- 62302 – Machinery/Equipment - Sales, Service, Repair (N.E.C.)
- 62303 – Industrial Supply Stores
- 69300 – Propane Dealers
- 86905 – Safety Equipment – Sale/Rental
- 89910 – Industrial and Oilfield Equipment – Rental

4. Automobiles, Sport Vehicles, Small Engines and Trailers

- 16300 – Tire Retreading
- 62701 – Auto Wreckers
- 65400 – Service Stations
- 65600 – Auto Dealers
- 65800 – Automobile Body Repair
- 65808 – General Automotive Repair
- 65809 – Electroplating Auto Parts
- 69912 – Trailers – Sales/ Rental with Service
- 69915 – Sport Vehicles – Sales/Service
- 89922 – Industrial Camp Trailers – Rental

5. Office, Medical and Entertainment Equipment

- 33901 – Medical Equipment – Sales/Service
- 62300 – Office Equipment – Sales/Service
- 67602 – Entertainment Equipment – Sales/Service

6. Yard and Home Improvement Centres

- 25403 – Home Improvement Centres
- 62908 – Garden Centres
- 69301 – Coal/Wood Yards

7. Other Retail Services

- 62903 – Sales Operations (N.E.C.)
- 64200 – Department/General Stores
- 66300 – Shoe Stores
- 66900 – Clothing/Yard Goods Stores
- 67300 – Hardware/Auto Parts Stores/Etc.
- 67601 – Furniture Stores
- 67604 – Appliances – Sales/Service
- 67802 – Household Appliances – Service Only
- 68100 – Drug Stores
- 69100 – Book/Stationery Stores/Etc.
- 69200 – Florists – Retail/Wholesale
- 69500 – Jewellery Stores
- 69901 – Auctions (N.E.C.)
- 69904 – Novelty/Gift/Hobby Stores/Etc.
- 69914 – Pet/Seed/Feed Stores
- 86909 – Inventory Services
- 89100 – Travelling Sales/Manufacturing Agents
- 89908 – Small Equipment/Appliances - Rental

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Fax: 780-422-5070

Employment and Immigration website:

<http://employment.alberta.ca>

Work Safe Alberta website:

www.worksafely.org

Workplace Health and Safety Contact Centre:

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

<http://employment.alberta.ca/whs-contact>

Certificate of Recognition (COR) Program:

<http://employment.alberta.ca/whs-partnerships>

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